

Practice 12-7**Combinations**

Find the number of combinations.

1. Choose 3 people from 4.

2. Choose 4 people from 6.

Use the numbers 3, 5, 8, 10, 12, 15, 20. Make a list of all the combinations.

3. 2 even numbers

4. 3 odd numbers

5. 1 even, 1 odd

6. any 2 numbers

7. You just bought five new books to read. You want to take two of them with you on vacation. In how many ways can you choose two books to take?

Charmayne is organizing a track meet. There are 4 runners in her class. Each runner must compete one-on-one against each of the other runners in her class.

8. How many races must Charmayne schedule? _____

9. Must Charmayne schedule permutations or combinations? _____

A committee for the end-of-year party is composed of four eighth graders and three seventh graders. A three-member subcommittee is formed.

10. How many different combinations of eighth graders could there be if there are three eighth graders on the subcommittee?

11. How many different combinations of seventh graders could there be if the subcommittee consists of three seventh graders?

12. Find the probability that all 3 members on the subcommittee are eighth graders.

13. Find the probability that all 3 members on the subcommittee are seventh graders.
